

ORDER CODE HV000420

# COMBI420

MULTIFUNCTION DEVICE FOR TESTS  
ON DOMESTIC AND INDUSTRIAL SYSTEMS  
WITH POWER ANALYSIS

COMBI420 carries out tests of electric systems in compliance with IEC/EN61557-1 and therefore measurements of **non-trip earth resistance**, tests on RCDs type A and AC up to a rated current of 1A, Insulation, Continuity and short-circuit currents, it also allows measuring and saving environmental parameters (illuminance, temperature), leakage current and the electric quantities active power, harmonics, power factor on single-phase systems and, last but not least, it offers the possibility of checking phase sequence only using one lead.

The **internal memory** allows **saving** the measurements carried out in order to subsequently **transfer them onto the PC** through the USB connection.

The instrument has been provided with the innovative **AUTO function**: by selecting this function and only setting the value of RCD current, COMBI420, connected to a power outlet, carries out tests of non-trip earth resistance, on RCDs and insulation tests in a sequence. At the end of the test, the device shows all results with the indication of compliance or non-compliance with the standards with simple symbols **OK** or **NOT OK**.



ORDER CODE HV000419

# COMBI419

MULTIFUNCTION DEVICE FOR TESTS  
ON DOMESTIC AND INDUSTRIAL SYSTEMS

COMBI419 carries out tests of electric systems in compliance with IEC/EN61557-1 and therefore measurements of **non-trip earth resistance**, tests on RCDs type A and AC up to a rated current of 1A, Insulation, Continuity and short-circuit currents, it also allows measuring and saving leakage current and offers the possibility of checking phase sequence only using one lead.

The **internal memory** allows **saving** the measurements carried out in order to subsequently **transfer them onto the PC** through the USB connection.

In order to make it versatile and fully functional for any kind of end user, the device has been provided with the innovative **AUTO function**: by selecting this function and only setting the value of RCD current, COMBI419, connected to a power outlet, carries out tests of non-trip earth resistance, on RCDs and insulation tests in a sequence. At the end of the test, the device shows all results with the indication of compliance or non-compliance with the standards with simple symbols **OK** or **NOT OK**.



## Functions and characteristics

- Continuity of protective conductors with 200mA
- Insulation with 50, 100, 250, 500, 1000VDC
- Tripping time of type A, AC Standard and Selective RCDs up to 1A
- Tripping current of type A, AC Standard and Selective RCDs up to 1A
- Loop/Line impedance P-N, P-P, P-PE also with high resolution (0.1mΩ) with optional accessory IMP57
- Non-trip earth resistance
- Contact voltage
- Phase sequence
- AUTO test (non-trip earth resistance, RCD and insulation test) on the outlets to be tested
- Power and cosphi measurements in single-phase systems
- Voltage and current harmonics up to the 49th with THD%
- Measurement of environmental parameters (temperature, humidity, illuminance) with optional probes
- Measurement of leakage currents (with optional clamp HT96U)
- Activation of measurements with optional remote lead PR400
- Context help on the display
- Storage of results
- Optical/USB interface for PC connection
- **Safety: IEC/EN61010-1, IEC/EN61557-1-2-3-4-6-7**
- **Measurement category: CATIII 240V (to earth), max 415V between inputs**
- **Power supply: 6x1.5V batteries type AA, LR6, AM3, MN 1500**
- **Size (LxWxH): 235x165x75mm**
- **Weight (batteries included): 1.2 kg**

## Accessories provided

UNIVERSALKITCOMBI	Set of 3 cables + 3 alligator clips + 3 leads
C2033X	3-terminal cable with SHUKO plug
BORSA75	Soft carrying bag
	User manual on CD-ROM and Quick guide for use
	ISO9000 calibration certificate

## Optional accessories

TOPVIEW2006	Windows software for PC + optical/USB cable
IMP57	Accessory for measuring Loop impedance with high resolution (0,1mΩ)
HT4005K	Standard AC 200A/1V clamp, diameter 40mm
HT4005N	Standard AC 5-100A/1V clamp, diameter 20mm
HT96U	AC clamp for leakage current, 1-100-1000A/1V, diameter 54mm
HT52/05	Probe for measuring temperature/humidity
HT53/05	Probe for illuminance measurement
SP-0400	Set for slinging the instrument over one's shoulder
PR400	Remote lead for test activation
VA500	Rigid transport case for device and accessories

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